

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION**

DENISE HARRINGTON, et al.,)	
)	
Plaintiffs,)	
)	No. 4:07-CV-1957 CAS
v.)	
)	
SUNBEAM PRODUCTS, INC., et al.,)	
)	
Defendants.)	

MEMORANDUM AND ORDER

This matter is before the Court on motions filed by remaining defendant Sunbeam Products, Inc. (“Sunbeam”) to exclude the expert testimony of plaintiffs’ expert witnesses William T. Cronenwett, Ph.D., John Reagan, and Ronald Gronemeyer. Plaintiffs oppose the motions and they are fully briefed. For the following reasons the Court will deny each motion.

Background.

This is a wrongful death and products liability action arising out of the death of plaintiffs’ decedent, Pauline Curtis. In summary, plaintiffs allege that a Sunbeam electric blanket purchased on February 3, 2007 was being used by Ms. Curtis and caught on fire on February 6, 2007, resulting in injuries that led to Ms. Curtis’ death eight days later. As alleged in the complaint, the remaining theories of liability against defendant Sunbeam are (1) strict products liability; (2) strict liability failure to warn; (3) negligence; (4) breach of express warranty; (5) breach of the implied warranty of merchantability; and (6) punitive damages.¹ Sunbeam alleges that the fire was caused by Ms. Curtis smoking.

¹The plaintiffs voluntarily dismissed their statutory warranty claims in Counts VI and VII of the complaint. See Order of January 29, 2009 (Doc. 57).

Legal Standard.

The admission of expert testimony in federal court is governed by Federal Rule of Evidence 702. Lauzon v. Senco Prods., Inc., 270 F.3d 681, 686 (8th Cir. 2001). “Rule 702 reflects an attempt to liberalize the rules governing the admission of expert testimony.” Weisgram v. Marley Co., 169 F.3d 514, 523 (8th Cir. 1999), aff’d, 528 U.S. 440 (2000). The Rule “favors admissibility if the testimony will assist the trier of fact.” Clark ex rel. Clark v. Heidrick, 150 F.3d 912, 915 (8th Cir. 1998). Doubt regarding “whether an expert’s testimony will be useful should generally be resolved in favor of admissibility.” Id. (citation and internal quotation omitted).

In Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), the United States Supreme Court interpreted Rule 702 to require district courts to be certain that expert evidence based on scientific, technical or other specialized knowledge is “not only relevant, but reliable.” Id. at 589. The district court must make a “preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.” Id. at 592-93.

The Eighth Circuit has explained that proposed expert testimony must meet three criteria to be admissible under Rule 702:

First, evidence based on scientific, technical, or other specialized knowledge must be useful to the finder of fact in deciding the ultimate issue of fact. This is the basic rule of relevancy. Second, the proposed witness must be qualified to assist the finder of fact. Third, the proposed evidence must be reliable or trustworthy in an evidentiary sense, so that, if the finder of fact accepts it as true, it provides the assistance the finder of fact requires

The basis for the third prerequisite lies in the recent amendment of Rule 702, which adds the following language to the former rule: ‘(1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.’ Fed. R. Evid. 702.

Lauzon, 270 F.3d at 686 (internal citations and punctuation omitted).

The Daubert decision lists several nonexclusive factors a court may examine in performing its “gatekeeper” role of screening expert testimony for relevance and reliability. These are: “(1) whether the theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) the known or potential rate of error; and (4) whether the theory has been generally accepted.” Lauzon, 270 F.3d at 686-87 (internal citations and punctuation omitted). Additional factors which have been developed in subsequent cases include “whether the expertise was developed for litigation or naturally flowed from the expert’s research; whether the proposed expert ruled out other alternative explanations; and whether the proposed expert sufficiently connected the proposed testimony with the facts of the case.” Id. (citations omitted). The Daubert list of factors is not exclusive, and does not function as a definitive “checklist or test.” Daubert, 509 U.S. at 593-94. Instead, the trial court retains great flexibility in customizing the analysis to fit the facts of each case. See Jaurequi v. Carter Mfg. Co., Inc., 173 F.3d 1076, 1083 (8th Cir. 1999).

A. William T. Cronenwett, Ph.D.

Sunbeam moves to exclude the testimony of plaintiffs’ expert witness, William T. Cronenwett, Ph.D., regarding defects in the subject electric blanket. Specifically, Sunbeam states that Dr. Cronenwett opined that an open circuit condition in one of the Positive Temperature Coefficient (PTC) bus wires in the blanket resulted in a arcing condition that was the ignition source of the fire. Sunbeam asserts that Dr. Cronenwett’s testimony does not meet the standards for admissibility set forth in Federal Rule of Evidence 702 and Daubert, 509 U.S. 579. Plaintiffs oppose the motion. Neither party has requested or suggested that an evidentiary hearing is required. The parties have

submitted an extensive evidentiary record, which includes Dr. Cronenwett's expert report, the expert report of Sunbeam's defense expert, deposition testimony, affidavits, and various exhibits underlying the experts' opinions. Accordingly, the Court finds that it can make a proper Daubert analysis without the need for an evidentiary hearing or oral argument.

Sunbeam asserts that Dr. Cronenwett's opinions do not fit the proven facts of this case, based on defendants' testing of the subject electric blanket which reveals that the blanket did not fail in the manner alleged by Dr. Cronenwett. Sunbeam contends that Dr. Cronenwett's opinion that the subject blanket had a defect or failed is speculative and is not the product of the application of reliable principles and methods, and is therefore inadmissible. Sunbeam does not challenge Dr. Cronenwett's qualifications or the relevance of his testimony. Rather, its challenge is directed to the reliability of his testimony.

First, Sunbeam argues that Dr. Cronenwett's testimony and opinions will not assist the trier of fact, because he did minimal inspection and conducted no testing of the blanket. Sunbeam states that approximately one-fourth of the blanket was destroyed in the fire, and examination of the PTC wire showed only one break in the PTC wire in a region where the cloth blanket shell had been burned away. The blanket controller and terminal block were undamaged by the fire. Sunbeam argues that Dr. Cronenwett's opinion, that the fire resulted when an open condition in one of the blanket's PTC wires occurred and resulted in an arcing condition that the blanket's safety circuit did not catch, is not based on any reliable scientific basis or testing and is directly contradicted by the testing performed by Sunbeam's expert. Sunbeam asserts that testing conducted by its expert conclusively shows that the actual safety circuit from the blanket contains no defects and properly

reacts to an open circuit condition, without creating a scenario that could lead to ignition as alleged by Dr. Cronenwett.

Plaintiffs first respond that Dr. Cronenwett is not their fire cause and origin expert, and state there is evidence, in the form of plaintiff Dewana Payne's testimony, that when she entered Ms. Curtis' room the only thing on fire was the blanket, there were no cigarettes in the room, her mother lacked the physical ability to light a cigarette on her own because she could not operate a lighter due to arthritis in her hands, and there were no matches in the house.

Plaintiffs state that Dr. Cronenwett is an electrical engineering expert with a wealth of knowledge concerning Sunbeam electric blankets, their electrical design, and their known fire-causing failure modes, and that he has examined hundreds of Sunbeam blankets and their components which have been involved in fires and contain the same heating element as the subject blanket. Plaintiffs assert that the Sunbeam PTC heating element is known to be at risk of causing fires, and must be connected to a functioning and effective safety circuit to minimize the fire hazard. Plaintiffs state that Dr. Cronenwett will explain to the jury how the PTC heating element works; how it can malfunction to cause a fire; how the Sunbeam safety circuit is designed to prevent a fire caused by the PTC heating element under certain circumstances; how the safety circuit, by its design, does not detect and react to all potential fire-causing events within the PTC heating element; and how, on occasion, the safety circuit has been found to have not functioned as designed or intended to prevent a fire in Sunbeam electric blankets. Plaintiffs also state that Dr. Cronenwett will offer his factual findings on examination of the subject blanket, and how from an electrical engineering perspective those findings are consistent with the fire having originated from electrical arcing in the heating element of the subject blanket.

With respect to Sunbeam's assertion that Dr. Cronenwett's opinion has been categorically proved incorrect because post-fire testing shows the subject blanket's safety circuit operated normally, plaintiffs offer Dr. Cronenwett's testimony that he has

previously demonstrated, and can recreate at will, the phenomenon that if the PTC cable of an energized Circuit 104 blanket ignites without a prior open circuit, even an undamaged and properly functioning Circuit 104 safety circuit does not detect that event. The electric blankets of Linda Wilmer (Photo 22), Lisa Noltensmeier (Photos 23 and 24), and Cadi Simins (Photos 25 and 26) are each highly suspicious of such an event.

Pls.' Ex. 9, Cronenwett Suppl. Report at 14. Plaintiffs further respond that the post-fire finding that the control works in the lab does not negate the fact that Sunbeam and Dr. Cronenwett have seen numerous returned Sunbeam Safety Circuit 104 blankets with apparent electrical arc damage to the wire (a potential fire hazard), yet on inspection the controls appear to operate normally. Plaintiffs also note that Sunbeam did not permit Dr. Cronenwett to test the operation of all of the controls returned to Sunbeam with blankets that have burned or broken heating elements. Dr. Cronenwett testified that the PTC heating element in the Sunbeam Circuit 104 products is substantially similar to that used in the earlier Circuit 100 products, and have identical potential electrical fire causing failure modes. Plaintiffs further state that both Sunbeam's retained expert and its in-house product safety engineer have testified that under certain circumstances, the Circuit 104 will not detect a local carbonized segment of the heating element, and that it "would be a potential fire risk."

"The only question relevant to the admissibility of . . . scientific evidence is whether it is sufficiently reliable and relevant to assist the jury's determination of a disputed issue." Bonner v. ISP Technologies, Inc., 259 F.3d 924, 929 (8th Cir. 2001) (citing Daubert, 509 U.S. at 594-595). "The district court must exclude expert testimony if it is so fundamentally unreliable that it can offer no assistance to the jury, otherwise, the factual basis of the testimony goes to the weight of the

evidence.” Meterlogic, Inc. v. KLT, Inc., 368 F.3d 1017, 1019 (8th Cir. 2004). The Court concludes that Dr. Cronenwett’s testimony is sufficiently reliable to assist the jury’s determination of a disputed issue. Sunbeam’s assertions concerning flaws in his methodology are proper subjects for its own expert testimony and for thorough cross-examination before the trier of fact.

As previously noted, Sunbeam does not challenge Dr. Cronenwett’s educational background or his competence to express opinions on matters of electrical engineering. Sunbeam’s main criticism of Dr. Cronenwett’s testimony is that his opinions do not fit the proven facts of this case, based on defendants’ testing of the subject blanket which reveals that the blanket did not fail in the manner alleged by Dr. Cronenwett. Sunbeam thus contends that Dr. Cronenwett’s opinion that the subject blanket had a defect or failed is speculative and is not the product of the application of reliable principles and methods.

The Court finds that the materials submitted with the motion indicate that Dr. Cronenwett has conducted extensive study of Sunbeam blankets, including numerous blankets with the same Circuit 104 safety circuit as in the subject blanket which were returned to Sunbeam by consumers for warranty replacement. Dr. Cronenwett’s Supplemental Report states that “[s]everal of the blankets showed clear evidence of having burned from electrical PTC cable failure, where the controller safety circuit did not operate to detect and prevent PTC malfunctions and subsequent fire.” Cronenwett Suppl. Report at 2. Based on his inspection and testing of some of the returned Circuit 104 blankets, Dr. Cronenwett concludes “that there are instances where Circuit 104 is called upon to do its job, and fails to do so, resulting in visible arcing, sparking, and fires.” Id. at 13. Dr. Cronenwett opines:

By design, if an open circuit occurs in one of the twisted pairs of the alloy conductors of the product, Circuit 104 should operate in less than 250 milliseconds (1/4 sec.) to de-energize the product. If it performs to that standard, one should never see a segment of PTC cable that has burned in two, or see beading (tiny melted

copper balls) on the copper alloy conductors of the PTC cable, or see a burn hole in a blanket caused by a PTC cable malfunction. Yet all of these are seen in blankets that have been returned to Sunbeam and produced for my inspection.

Cronenwett Suppl. Report at 13. Dr. Cronenwett concludes, “These returned products demonstrate that there are instances in which the C-104 safety circuit does not operate properly to detect PTC malfunctions that have the ability to ignite fires, and does not turn OFF electricity to the PTC cable in time to prevent these fires.” Id. at 17.

Dr. Cronenwett’s conclusion is as follows:

[I]f it is the opinion of others that the fire originated from the electric blanket, and reasonable alternative ignition sources other than the electric blanket itself have been eliminated as the cause of this fire, it is my opinion to a reasonable degree of engineering certainty this fire was started by a malfunction of the electric blanket PTC cable, and subsequent failure of the blanket safety circuit to prevent ignition of the PTC cable, to the exclusion of any other components of the electric blanket system.

Cronenwett Suppl. Report at 17-18.

It is clear that Dr. Cronenwett’s opinions and conclusions are based upon and informed by his examination of the subject blanket, his examination of returned blankets which also contain Circuit 104, his knowledge of the particular structure and electrical circuitry of this type of blanket, and by application of established principles of electrical engineering to the known facts. His opinions appear to be based in large part upon prior instances of failures in Sunbeam blankets, including those identified by Sunbeam engineers, and he has applied principles of electrical engineering to identify a particular failure that could have started the fire in the instant case. Dr. Cronenwett’s opinions are therefore the product of the application of reliable principles and methods, and are not impermissibly speculative.

Sunbeam’s post-fire testing of the subject blanket’s safety circuit and controls does not conclusively establish that Dr. Cronenwett’s opinions or methods are unreliable and do not “fit the

facts” of the case. Based on his examination of returned fire-damaged blankets containing C-104 safety circuits, Dr. Cronenwett concluded there are instances in which the C-104 safety circuit does not operate properly to detect PTC malfunctions that have the ability to ignite fires, and does not turn off electricity to the PTC cable in time to prevent fires. Dr. Cronenwett has stated he has demonstrated and can recreate the phenomenon that if the PTC cable of an energized Circuit 104 blanket ignites without a prior open circuit, even an undamaged and properly functioning Circuit 104 safety circuit does not detect that event.

Sunbeam will be free to address its post-fire testing of the subject blanket through its own expert witnesses and in cross examination of Dr. Cronenwett, but on the record before the Court, Sunbeam’s testing does not determine the issue of admissibility of Dr. Cronenwett’s opinions. The disagreement between plaintiffs’ expert and Sunbeam’s experts concerning the significance of the post-fire testing is a matter for resolution by the jury.

Sunbeam also argues that Dr. Cronenwett’s opinions and testimony are based largely on examinations and observations he has made in his work on unrelated cases and products, specifically, electric blankets with the Circuit 100 safety circuit, which it argues are not substantially similar to the subject blanket. The Court is not persuaded. Dr. Cronenwett’s experience with incidents involving blankets with the Circuit 100 safety circuit may be relevant because all of the blankets involved apparently have a substantially similar PTC heating element. Dr. Cronenwett’s opinions appear to take into account the Circuit 104’s interaction with and effect upon the PTC element, based upon his supplemental report and deposition testimony. This issue goes to the weight rather than the admissibility of Dr. Cronenwett’s testimony, and is a matter for cross examination.

For these reasons, Sunbeam's motion to exclude the testimony and opinions of plaintiffs' expert witness Dr. Cronenwett should be denied.

B. John Reagan.

Sunbeam moves to exclude the testimony of plaintiffs' expert witness, John Reagan, that an alleged defect in the subject blanket's PTC wire was the cause of the fire.² Sunbeam asserts that Mr. Reagan's testimony does not meet the standards for admissibility set forth in Federal Rule of Evidence 702 and Daubert, 509 U.S. 579. Plaintiffs oppose the motion. Neither party has requested or suggested that an evidentiary hearing is required. The parties have submitted an extensive evidentiary record, which includes Mr. Reagan's expert report, the expert report of Sunbeam's expert, Mr. Reagan's deposition testimony, medical records, and other deposition testimony. Accordingly, the Court finds that it can make a proper Daubert analysis without the need for an evidentiary hearing or oral argument.

Sunbeam first asserts that Mr. Reagan's opinions do not fit the proven facts of this case, based on defendants' testing of the subject electric blanket which reveals that the blanket did not fail in the manner alleged by Mr. Reagan. The Court rejects this assertion, for the same reasons discussed above with respect to plaintiffs' expert Dr. Cronenwett.

Sunbeam also challenges Mr. Reagan's qualifications, asserting that he is not qualified as an expert witness by knowledge, skill, experience, training, or education to testify concerning electrically-heated bedding products such as the subject blanket. Sunbeam states that Mr. Reagan admitted in his deposition that (1) he has not studied how the settings on the control operate to

²Sunbeam does not challenge Mr. Reagan's opinion and proposed testimony that the electrical system in plaintiff Payne's house was not the ignition source for the fire, and that the house's electrical system did not contain any deficiencies that could have contributed to the cause of the fire.

control the heat output of the PTC wires, (2) he has not examined how the potentiometer on the printed circuit board interfaces with the circuitry on the board; (3) he has not studied the circuitry of the controller; (4) he has not studied how the circuitry operates at lower settings versus higher settings as to time; (5) he is not familiar with the control to know whether it is discreet on or off, and is not exactly clear on how the controller works to supply energy to the PTC cable; (6) he does not know whether the PTC cable is energized at all times when the control is on regardless of the control setting; and (7) he is not familiar with the term “bifilar,” which refers to the winding of the PTC wire heating elements. Sunbeam asserts that Mr. Reagan’s admitted lack of understanding of the product at issue should disqualify him from providing expert testimony as to alleged defects in the product, as to be qualified as an expert under Rule 702 and Daubert he must be able to establish that he has a complete understanding of the product in order to show the basis of his opinions.

Plaintiffs first respond that Mr. Reagan is an electrical engineering expert, not a fire cause and origin expert, and that his opinions are premised on the opinions of others that the area of fire origin was at the shell of the subject blanket. Plaintiffs state that it is now proved by the physical evidence-- numerous returned, fire-damaged Sunbeam electric blankets which contain the Circuit 104 safety circuits--that in some circumstances, Circuit 104 is not operating to prevent fires in these products.

Plaintiffs submit that while Sunbeam is critical of Mr. Reagan for not knowing the functional details of the operation of the control and its internal electrical components, this is a “moot point.” Pls.’ Mem. Opp. at 4. Sunbeam contends the control for the subject blanket, in its present state under laboratory conditions, is functioning as designed. Plaintiffs state that Mr. Reagan expresses no opinions about the control or the safety circuit other than that visual examination and electrical testing of the controller reveal no evidence of component or connection failure, and that the controller and

an exemplar blanket were determined to be functional. Plaintiffs contend that because Mr. Reagan is not critical of the function of the safety circuit, controls and terminal block, it is unimportant that he was not able to discuss the “intricacies of its sophisticated electrical function at the level Sunbeam tested him in cross examination during his discovery deposition.” Id.

Plaintiffs assert that given the premise supplied by other witnesses that the fire originated in the subject blanket, Mr. Reagan has inspected the subject blanket and eliminated its power cords, control station and terminal block as potential ignition sources and, based on his examination of the entire blanket as an electrical engineer, concluded that the only remaining ignition source for the fire was a localized failure in the subject blanket’s PTC buss wires. Plaintiffs note that both Sunbeam’s retained expert and its in-house product safety engineer have testified that under certain circumstances, Circuit 104 will not detect a local carbonized segment of the heating element, and that it “would be a potential fire risk.”

Plaintiffs further respond that in Mr. Reagan’s examination of the PTC heating element wire of the subject blanket, he found one severed conductor and observed that the individual conductors on each side of the severed location were melted together, one more so than the other, although the conductors immediately adjacent to the severed point were not melted. Plaintiffs assert that the melted conductors could only have been caused by one of two events: Either the fire that was consuming the blanket became hot enough to melt the copper alloy conductor but did not damage the adjacent conductors, or an electrical arc occurred and melted the copper alloy conductor. Plaintiffs note that Sunbeam’s own expert, John Loud, could not determine whether the melting was caused by the flame of the fire, or by an arc with a normally operating Circuit 104 controller. (Ex. 21, E^xponent Report at 37).

Plaintiffs contend Mr. Reagan's opinions that the fire began as a result of an arcing event in the PTC wire are reasonably based upon (1) his background, training and experience in electrical engineering and his experience in reviewing fires of electrical origin; (2) eyewitness testimony; and (3) his physical inspection of the subject blanket. Plaintiffs contend that Mr. Reagan's opinions, their bases and his methodologies are supportable and reliable, and that his methodologies are identical to those used by Sunbeam's engineering expert--specifically, visually examining the subject blanket with the eye and expertise of an engineer, testing with devices such as electrical meters to check the continuity and conductivity of the wiring and components, and connecting the subject components to an exemplar blanket to test their operation.

Sunbeam replies that the electric blanket and its components, including the PTC wiring, blanket control and safety circuit, operate in conjunction with each other as an entire unit, not independently, and therefore knowledge of all the component parts and how they operate together is essential to providing an opinion about the product. Sunbeam further replies that Reagan did not conduct any tests on the subject blanket to attempt to support his theory that an arcing event caused the fire in the subject blanket, and the lack of testing by Mr. Reagan and the un rebutted tests performed by Sunbeam's experts show that Mr. Reagan's opinions are not the result of an applied scientific methodology.

Sunbeam does not challenge Mr. Reagan's qualifications as an electrical engineer or the relevance of his testimony. Rather, it attacks Mr. Reagan's lack of specific knowledge about various aspects of the technology incorporated into the controller and safety circuit of the subject blanket. Although Sunbeam asserts in its memorandum that all of the components of the subject blanket function together and cannot be understood or evaluated as discrete parts, there is nothing in the

record to support this bare assertion. Mr. Reagan's testimony accepts the opinions and test results of Sunbeam's experts that the controller and safety circuit function normally post-incident, rules these components out as causes of the fire, and focuses only on the issue of how the fire began in the blanket. Mr. Reagan's report indicates that he was present and observed the tests conducted on the subject blanket and exemplar blankets at St. Louis Testing Laboratories on July 6, 2007, and was present and observed the tests conducted on the subject blanket and exemplar blankets at Schaefer Engineering on October 11, 2007. See Pls.' Ex. 23 at 3. The fact that Mr. Reagan did not personally perform the tests is immaterial under these circumstances.

Mr. Reagan's report states that in addition to observing the tests, he reviewed the electric blanket packaging materials and User Manual, x-ray and SEM images prepared by St. Louis Testing Laboratories, the origin and cause report prepared by plaintiffs' expert Mr. Gronemeyer, and the expert and supplemental expert report prepared by plaintiffs' expert Dr. Cronenwett. Applying his experience as an electrical engineer to his examination of the subject blanket, Mr. Reagan focuses on the broken PTC wire with melted ends, the only part of the blanket which does not appear to have functioned normally, and opines that an arcing event in the wire was the cause of the fire. As plaintiffs point out, Sunbeam's own expert report states that its expert has not been able to determine with certainty whether the melting in the PTC wire was caused by fire from an external source, or by a parting arc with a normally operating Circuit 104 controller. See Pls.' Ex. 21 at 37. Further, the Court rejects Sunbeam's assertion that its experts' testing categorically disproves Mr. Reagan's opinions because, in addition to this admission contained in Sunbeam's expert report, consumers have returned numerous fire-damaged electric blankets to Sunbeam that contain what appear to be functioning Circuit 104 safety circuits.

The Court finds that Mr. Reagan's proposed testimony is sufficiently reliable in an evidentiary sense. Mr. Reagan has extensive training, qualifications and experience as an electrical engineer and in investigating fires of electrical origin, and his opinions are based on his examination and observations of the house and the subject blanket and on the unchallenged test results obtained by Sunbeam's experts, which he personally observed being conducted. Mr. Reagan's methodologies and bases for his opinions appear to be similar to those of Sunbeam's own experts.

The Court finds that Mr. Reagan's opinions are "sufficiently reliable and relevant to assist the jury's determination of a disputed issue." Bonner, 259 F.3d at 929. Sunbeam's assertions concerning flaws in his methodology and inadequacies in his understanding of the functioning of the various components of the subject blanket are proper subjects for its own expert testimony and for thorough cross-examination before the trier of fact. For these reasons, Sunbeam's motion to exclude the testimony and opinions of plaintiffs' expert witness Mr. Reagan should be denied.

C. Ronald Gronemeyer.

Sunbeam moves to exclude the testimony of plaintiffs' fire cause and origin expert, Ronald Gronemeyer, that (1) the subject blanket was the cause of the fire, and (2) smoking materials were not the cause of the fire. Sunbeam moves to limit Mr. Gronemeyer's testimony to issues of identifying potential ignition sources for the fire.

Sunbeam asserts that Mr. Gronemeyer's testimony does not meet the standards for admissibility set forth in Federal Rule of Evidence 702 and Daubert, 509 U.S. 579 (1993). Plaintiffs oppose the motion. Neither party has requested or suggested that an evidentiary hearing is required. The parties have submitted an extensive evidentiary record, which includes Mr. Gronemeyer's expert report, the expert report of Sunbeam's fire cause and origin expert, Mr. Gronemeyer's deposition and

curriculum vitae, medical records, and a U.S. Consumer Product Safety Commission Epidemiologic Investigation Report on the incident. Accordingly, the Court finds that it can make a proper Daubert analysis without the need for an evidentiary hearing or oral argument.

Sunbeam asserts that Mr. Gronemeyer's investigation and report concerning the incident provide no basis for his opinion that the origin of the fire was a result of a product defect, rather than smoking materials, and therefore his testimony fails to satisfy Daubert's requirements. Sunbeam does not challenge Mr. Gronemeyer's qualifications or the relevance of his testimony. Rather, its challenge is directed to the reliability of his testimony. Specifically, Sunbeam asserts that Mr. Gronemeyer's investigation of the fire was deficient in the following respects: (1) he did not follow the methodology set out in National Fire Protection Association publication 921 Guide to Fire and Explosion Investigation ("NFPA 921"); (2) he did not know all pertinent and material information relevant to the investigation regarding smoking materials as a possible cause of the ignition, and made no meaningful inquiry regarding smoking materials, so that these materials can be reasonably eliminated as a potential cause of the fire;³ (3) he did not conduct any testing; and (4) he relied on the inadmissible conclusions and opinions of Dr. Cronenwett and Mr. Reagan in identifying the subject blanket as the source of ignition.

Plaintiffs respond that Mr. Gronemeyer's opinions are admissible because they are reasonably based upon (1) his background, training and experience in fire investigation; (2) his personal

³Specifically, Sunbeam asserts that Mr. Gronemeyer was not aware of the following material information concerning smoking materials: (a) someone, presumably plaintiff Payne or Ms. Curtis, reported to a nurse that the fire could have been caused by a cigarette lighter; (b) plaintiff Payne stated she could have left Ms. Curtis unattended for 30 or more minutes; (c) Ms. Curtis had a history of smoking one-half to one pack of cigarettes per day; (d) Ms. Curtis smoked in the chair where the fire occurred; (e) Ms. Curtis was right-handed; and (f) the fire was first observed on Ms. Curtis' right thigh.

observations and inspection of the fire scene, related property and the subject blanket; and (3) his interview of the only eyewitness, plaintiff Payne. Plaintiffs also assert that Mr. Gronemeyer's investigation was in conformance with generally accepted fire science methodology and investigation practices.

Plaintiffs state that Mr. Gronemeyer became a fire fighter with the St. Louis Fire Department in 1966, received a degree in fire protection engineering in 1971, was the chief fire investigator for the St. Louis Fire Department for over thirteen years, and has been doing professional fire investigation for twenty-six years. He currently teaches fire investigation at a junior college, and uses NFPA 921 as the text for that course. Plaintiffs note that Mr. Gronemeyer has been conducting fire investigations and determining cause and origin long before NFPA 921 was first published in 1992.

Plaintiffs quote NFPA 921's statements that it is "not designed to encompass all of the necessary components of a complete investigation or analysis of any one case," NFPA 921, § 1.3.2 (2004 ed.), and that "[n]ot every portion of this document may be applicable to every fire or explosion incident. It is up to investigators (depending on their responsibility, as well as the purpose and scope of their investigation) to apply the appropriate recommended procedures in this guide to a particular incident." *Id.*, § 1.3.3. Plaintiffs state that although Sunbeam cites seven subparagraphs of NFPA 921 in connection with its assertion that Mr. Gronemeyer did not adequately follow its procedures, the full text of NFPA 921 has twenty-seven chapters, 226 sections, and over 3000 subparagraphs. Plaintiffs state that Sunbeam did not ask Mr. Gronemeyer at his deposition whether he considered those seven subparagraphs applicable in his investigation,

Plaintiffs assert that Mr. Gronemeyer systematically approached the scene and utilized the scientific method to reach his opinions, by collecting data, inspecting the scene, taking photographs,

interviewing the only living eyewitness,⁴ and examining the objects in the area where the fire occurred (the chair, floor, bed, lunch tray) and the subject blanket, which was the only heat-producing device reported to be in the immediate vicinity of the fire location. Based on these actions, Mr. Gronemeyer developed a hypothesis that the fire may have originated in the subject blanket.

Plaintiffs state that NFPA 921 § 4.3.6 does not require experimental testing of the hypothesis, and provides that cognitive testing of the hypothesis through deductive reasoning is acceptable. In this case, plaintiffs state that while Mr. Gronemeyer was aware there was a possibility the fire was caused by a cigarette or cigarette lighter, there was no physical evidence that a cigarette or lighter caused the fire. None were reported to be in the immediate area of the point of origin of the fire. Mr. Gronemeyer interviewed Ms. Payne, as recommended by NFPA § 18.3.7. Ms. Payne reported to Mr. Gronemeyer that she provided her mother with cigarettes, her mother last had a cigarette several hours before the fire was discovered, and the cigarettes and lighter were kept in Ms. Payne's room, not in her mother's room. Ms. Payne told Mr. Gronemeyer that she lit her mother's cigarettes for her, her mother was eating her lunch, not smoking, and had not smoked for several hours when the fire began. Ms. Payne also told Mr. Gronemeyer that she had been in her mother's room several times since her mother last had a cigarette, and that she had brought her mother lunch, went downstairs, and after a time came back to discover the fire. Relying on plaintiff Payne's statements, Mr. Gronemeyer ruled out smoking materials as a cause of the fire.

Plaintiffs state that Mr. Gronemeyer also examined the subject blanket, observed physical evidence that there was melting or beading in the PTC wire, conducted an "arc survey," and did not

⁴Sunbeam objects that plaintiffs mischaracterize plaintiff Payne as an eyewitness to the start of the fire. This is not correct. Plaintiffs only assert that Ms. Payne is the only living individual who witnessed the fire--not that she observed its origin.

identify any other type of arcing event other than in the heating element of the blanket, before concluding that the melting was the result of electrical arcing activity.

The Court finds that Mr. Gronemeyer's proposed testimony is sufficiently reliable in an evidentiary sense. Mr. Gronemeyer has extensive training, qualifications and experience as a fire investigator, and his opinions are based on his interview with plaintiff Payne, his examination and observations of the fire scene and the subject blanket, and on the reports of plaintiffs' electrical engineer experts, which the Court has determined are admissible. The methodologies and bases for Mr. Gronemeyer's opinions are thus sufficiently reliable for their admission. Cf. Hickerson v. Pride Mobility Prods. Corp., 470 F.3d 1252, 1256-58 (8th Cir. 2006) (holding a fire expert's method sufficiently reliable when he examined burn and damage patterns, considered testimony, and identified a point of origin). There is no "bright-line rule for testing in fire cases" and under "certain circumstances, a fire expert can offer a reliable opinion based upon specific observation and expertise." Presley v. Lakewood Eng'g & Mfg. Co., 553 F.3d 638, 644 (8th Cir. 2009).

The Court finds that Mr. Gronemeyer's opinions are "sufficiently reliable and relevant to assist the jury's determination of a disputed issue." Bonner, 259 F.3d at 929. Sunbeam's assertions concerning flaws in his methodology and the factual basis of his testimony, such as his lack of knowledge of the reference to a cigarette lighter in the medical records, go to the weight and credibility of his testimony as opposed to its admissibility, see Meterlogic, 368 F.3d at 1019, and are proper subjects for thorough cross-examination before the trier of fact. For these reasons, Sunbeam's motion to exclude the testimony and opinions of plaintiffs' expert witness Mr. Gronemeyer should be denied.

Conclusion.


For the foregoing reasons, the Court concludes that the reasoning or methodology underlying the testimony and opinions of plaintiffs' expert witnesses Dr. Cronenwett, John Reagan, and Ronald Gronemeyer is scientifically valid, and can properly be applied to the facts in issue in this case. Sunbeam's motions to exclude the expert testimony and opinions of plaintiffs' expert witnesses should therefore be denied.

Accordingly,

IT IS HEREBY ORDERED that defendant Sunbeam Products, Inc.'s Motion to Exclude Expert Testimony and Opinions of Plaintiffs' Expert Witness William T. Cronenwett, Ph.D., is **DENIED**. [Doc. 28]

IT IS FURTHER ORDERED that defendant Sunbeam Products, Inc.'s Motion to Exclude Expert Testimony and Opinions of Plaintiffs' Expert Witness John Reagan is **DENIED**. [Doc. 30]

IT IS FURTHER ORDERED that defendant Sunbeam Products, Inc.'s Motion to Exclude Expert Testimony and Opinions of Plaintiffs' Expert Witness Ronald Gronemeyer is **DENIED**. [Doc. 32]



CHARLES A. SHAW
UNITED STATES DISTRICT JUDGE

Dated this 13th day of March, 2009.